GRANULOMA INGUINALE

DISEASE REPORTING

In Washington

DOH receives approximately 2 (1991) to 0 (2001) reports of granuloma inguinale per year. Most cases occur among immigrants from, or travelers to, endemic areas.

Purpose of reporting and surveillance

- To assure the adequate treatment of infected individuals in order to curtail infectiousness and prevent sequelae of infection.
- To identify, contact, and treat sexual contacts of reported cases, in order to break the chain of transmission.

Reporting requirements

- Health care providers: notifiable to Local Health Jurisdiction within 3 work days
- Hospitals: notifiable to Local Health Jurisdiction within 3 work days
- Laboratories: no requirements for reporting
- Local health jurisdictions: notifiable to DOH Infectious Disease and Reproductive Health within 7 days of case investigation completion or summary information required within 21 days

CASE DEFINITION FOR SURVEILLANCE

Clinical criteria for diagnosis

A slowly progressive ulcerative disease of the skin and lymphatics of the genital and perianal area caused by infection with *Calymmatobacterium granulomatis*. A clinically compatible case would have one or more painless or minimally painful granulomatous lesions in the anogenital area.

Laboratory criteria for diagnosis

- Demonstration of intracytoplasmic Donovan bodies in Wright or Giemsa-stained smears or biopsies of granulation tissue.

Case definition

- Confirmed: a clinically compatible case that is laboratory confirmed.

A. DESCRIPTION

1. Identification

A chronic and progressively destructive, but poorly communicable bacterial disease of the skin and mucous membranes of the external genitalia, inguinal and anal regions. An indurated nodule or papule becomes a slowly spreading, nontender, exuberant, granulomatous, ulcerative or cicatricial process. The lesions are characteristically nonfriable, beefy red granulomas that extend peripherally with characteristic rolled edges and eventually form fibrous tissue. Lesions occur most commonly in warm, moist surfaces such as the folds between the thighs, the perianal area, the scrotum, or the vulvar labia and vagina. The genitalia are involved in close to 90% of cases, the inguinal region in close to 10%, the anal region in 5%-10% and distant sites in 1%-5%. If neglected, the process may result in extensive destruction of genital organs and spread by autoinoculation to other parts of the body.

Laboratory diagnosis is based on demonstration of intracytoplasmic rod shaped organisms (Donovan bodies) in Wright or Giemsa-stained smears of granulation tissue or by histologic examination of biopsy specimens; pathognomonic are large infected mononuclear cells filled with deeply staining Donovan bodies. Culture is difficult and unreliable. PCR and serology are available on a research basis. *Haemophilus ducreyi* should be excluded by culture on appropriate selective media.

2. Infectious Agent

Calymmatobacterium granulomatis (*Donovania granulomatis*), a gram-negative bacillus, is the presumed etiologic agent; this is not certain.

3. Worldwide Occurrence

Rare in industrialized countries (rare in the US, but cluster outbreaks occasionally occur). Endemic in tropical and subtropical areas, such as: southern India; Papua New Guinea; central and northern Australia; occasionally in Latin America; the Caribbean islands; and central, eastern and southern Africa. It is more frequently seen among males than females and among people of lower socioeconomic status; it may occur in children aged 1-4 years but is predominantly seen at ages 20-40.

4. Reservoir

Humans.

5. Mode of Transmission

Presumably by direct contact with lesions during sexual activity, but in various studies only 20%-65% of sexual partners were infected, which suggests some cases are transmitted nonsexually.

6. Incubation period

Unknown; probably between 1 and 16 weeks.

7. Period of communicability

Unknown; probably for the duration of open lesions on the skin or mucous membranes.

8. Susceptibility and resistance

Susceptibility is variable; immunity apparently does not follow attack.

B. METHODS OF CONTROL

1. Preventive measures:

Except for those measures applicable only to syphilis, preventive measures are those for Syphilis, B1. Educational programs in endemic areas should stress the importance of early diagnosis and treatment.

2. Control of patient, contacts and the immediate environment:

a. Report to local health authority.
b. Isolation: None; avoid close personal contact until lesions are healed.
c. Concurrent disinfection: Care in disposal of discharges from lesions and articles soiled therewith.
d. Quarantine: None.
e. Immunization of contacts: Not applicable; prompt treatment upon recognition or clinical suspicion of infection.
f. Investigation of contacts and source of infection: Examination of sexual contacts.
g. Specific treatment for adults: doxyclycline 100 mg PO twice a day for at least 3 weeks or trimethoprim-sulfamethoxazole one double-strength (800mg/160mg) tablet PO twice a day for at least 3 weeks. Alternative regimens include ciprofloxacin 750 mg PO twice a day for at least 3 weeks, or erythromycin base 500 mg PO four times a day for at least 3 weeks, or azithromycin 1 gm PO once per week for at least 3 weeks.

3. Epidemic measures

Not applicable.

4. International measures

See Syphilis, B4.